

003330 P01 USA/ETCH/METAL/PJS  
Application No: 10/824,123  
Page 6 of 14

## REMARKS

By this amendment, claims 1-12 and 23-27 are pending in the application, of which, claims 1, 4 and 7-12 are being amended, and claims 23-27 are being added.

Claims 13-22 are being canceled as drawn to a non-elected invention, without prejudice or disclaimer.

The Specification is being corrected to add the parent U.S. patent Application No. 6,942,929.

These amendments are fully supported by the Specification and original claims and add no new matter. Entry of the amendments and reconsideration of the present case is respectfully requested.

Applicant affirms the election to prosecute the claims of Group I as defined by the Examiner, namely claims 1-12. Traverse is on grounds that the component claims of Group I and the method claims of Group II, are to a component and a corresponding method of fabricating the component, respectively, and as such they should be both examined in the same application. Furthermore, it would be expedient for the Examiner to search both sets of claims at the same time, as the original component and method claims both contained similar language, namely to a component comprising a structure, and an electroplated coating comprising yttrium on the structure.

003330 P01 USA/ETCH/METAL/PJS  
Application No: 10/824,123  
Page 7 of 14

### **Claim Objections**

The Office Action objected to claim 11 under 35 U.S.C. 1.75(c) as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Claim 7 from which claim 11 depends is to a substrate processing chamber comprising a component comprising a structure having an electroplated coating comprising yttrium-containing species. The transition phrase "comprising" is open-ended, that is, the electroplated coating may also comprise other materials. Consequently, claim 11 is a proper dependent claim as it further limits claim 7 by reciting another material present in the electroplated coating, namely partially stabilized zirconium oxide.

### **Rejection Under 35 U.S.C. 112**

The Office Action rejected claims 4 and 17-12 under 35 U.S.C. 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 4 and 10, the language "stoichiometric ratio" has been removed from these claims, as thus, this rejection should be withdrawn. Note that deletion of the language broadens the scope of the claim, and as such, is not a narrowing of the scope of the properly construed claim. TurboCare v. General Electric Co., 264 F.3d 1111 (Fed. Cir. 2001); Bose Corp. v. JBL, Inc., 274 F.3d 1354 (Fed. Cir. 2001); and Interactive Pictures Corp. v. Infinite Pictures, Inc., 274 F.3d 1371 (Fed. Cir. 2001). Thus, the scope of the doctrine of equivalents applied to the claim should not be limited under the rules of Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 2002 Lexis 3818 (May 28, 2002).

003330 P01 USA/ETCH/METAL/PJS  
Application No: 10/824,123  
Page 8 of 14

Claim 7 has been amended to change gas supply to gas distributor, and gas exhaust to gas exhaust port. The proposed amendment only makes express, a recitation of a feature that was already inherent in the original claim, and thus, is not a narrowing of the scope of the properly construed claim under the Festo rules.

Claim 11 is a proper dependent claim as it further limits claim 7 by reciting another material present in the electroplated coating, namely partially stabilized zirconium oxide. Claim 7 from which claim 11 depends uses the transition phrase "comprising" which is open-ended, i.e., the electroplated coating may also comprise other materials without reciting the language "further comprising" which is redundant language in view of the open-ended transition. The stabilized zirconium oxide of claim 11 is stabilized by the yttrium-containing species recited in parent claim 7.

#### **Rejection Under 35 U.S.C. 102**

1. The Office Action rejected claims 1 and 2 under 35 U.S.C. 102(b) as being anticipated by Goward et al. (USP 3,754,903).

In order to anticipate a reference, each and every element of the claim must be disclosed by a single prior art reference. W.L. Gore & Assocs. V. Garlock, Inc., (Fed Cir. 1983), cert. denied, 469 U.S. 851 (1984).

Applicant respectfully submits that Goward et al. does not anticipate amended claim 1, or claim 2 which is dependent therefrom, because Goward et al. does not teach each and every element of claim 1. As amended, claim 1 is to a component comprising "a substrate processing chamber component structure". As acknowledged by the Office Action, Goward et al. "teaches a turbine engine component having a super alloy substrate which is coated with the claimed Y-Al compounds." A turbine engine component is not the same as a substrate processing chamber component. By analogy, a 4-wheel drive car does not have the same structural features as a 2-wheel drive car, although both are cars. The substrate processing chamber component

003330 P01 USA/ETCH/METAL/PJS  
Application No: 10/824,123  
Page 9 of 14

structure has a configuration adapted for a substrate processing chamber. The turbine engine component does not have a structure corresponding to that of a substrate processing chamber component, but instead has a configuration and structural features adapted for a turbine engine and not a substrate processing chamber. Thus, even though both are components, the claimed "substrate processing chamber component structure" is not anticipated by the turbine engine component taught by Goward et al..

Furthermore, Goward et al. also does not teach a substrate processing chamber component structure comprising an electroplated coating as claimed. Instead, as recognized by the Office Action, Goward et al. teaches a coating which is applied by sputtering. A sputtered coating is not the same structure as an electroplated coating, by the same arguments and analogy, as recited above. This structural difference is defined by the present claim. Thus, Goward et al. does not anticipate claims 1 and 2.

2. The Office Action rejected claims 1, 2 and 6 under 35 U.S.C. 102(b) as being anticipated by Jackson et al. (USP 6,287,644).

Jackson et al. also does not teach each and every element of amended claim 1, or claims 2 and 6 which are dependent therefrom. Claim 1 is to a component that comprises "a substrate processing chamber component structure". Jackson et al. teaches a coating for a turbine and engines (Jackson, Field of the Invention). A turbine and engines are not substrate processing chamber components. The turbine and engine have configurations adapted for a turbine or engine, respectively, and are not substrate processing chamber component structures adapted for a substrate processing chamber. The turbine or engine does not have a structure corresponding to that of a substrate processing chamber component, even though both are called components. Thus the substrate processing chamber component structure is not anticipated by the turbine or engine described by Jackson et al..

Furthermore, Jackson et al. also does not teach a structure comprising an electroplated coating as claimed. Instead, as recognized by the Office Action, Jackson

003330 P01 USA/ETCH/METAL/PJS  
Application No: 10/824,123  
Page 10 of 14

et al. teaches a coating which is applied by vapor deposition. A vapor deposition coating is not the same structure as an electroplated coating, by the same analogy as recited above. This structural difference is defined by the present claim. Thus, Jackson et al. does not anticipate claims 1, 2 and 6.

3. The Office Action further rejected claims 1 and 2 under 35 U.S.C. 102(b) as being anticipated by Aguero et al. (USP 5,807,613).

Again, Aguero et al. also does not teach each and every element of amended claim 1, or claim 2 which is dependent therefrom. Claim 1 is to a component that comprises "a substrate processing chamber component structure". As acknowledged by the Office Action, "Aguero et al. teaches coating a super alloy substrate with a Al-Y alloy coating layer, wherein these materials are useful for turbine engine components." A turbine engine component is not substrate processing chamber component because the turbine engine component has a structure adapted for a turbine engine, and is not a substrate processing chamber component structure. The turbine engine component does not have a structure corresponding to that of a substrate processing chamber component, even though both are components. Thus the substrate processing chamber component structure is not anticipated by the turbine engine component of Aguero et al..

Furthermore, Aguero et al. also does not teach a structure comprising an electroplated coating as claimed. Instead, as recognized by the Office Action, Aguero et al. teaches a coating which is applied by ion plating deposition. An ion plating deposition coating does not have the same structure as an electroplated coating as claimed. This structural difference is defined by the present claim, and thus, Aguero et al. does not anticipate claims 1 and 2.

003330 P01 USA/ETCH/METAL/PJS  
Application No: 10/824,123  
Page 11 of 14

4. The Office Action rejected claims 1-4 and 6 under 35 U.S.C. 102(b) as being anticipated by Morita et al. (USPN 2002/0012791).

As recognized by the Office Action, Morita et al. does not teach a structure comprising an electroplated coating as claimed. Instead, Morita et al. teaches a coating layer which is applied with a sintered composition. A sintered coating layer does not have the same structure as an electroplated coating as claimed. This structural difference is defined by the present claim, and thus, Morita et al. does not anticipate claims 1-4 and 6.

5. The Office Action rejected claims 1-4 and 7-10 under 35 U.S.C. 102(b) as being anticipated by Murakawa et al. (USP 6,447,937).

Again, as acknowledged by the Office Action, Murakawa et al. does not teach a structure comprising an electroplated coating as claimed. Instead, Murakawa et al. teaches a coating layer which is applied with a sintered composition. A sintered coating layer does not have the same structure as an electroplated coating as claimed. This structural difference is defined by the present claim, and thus, Murakawa et al. does not anticipate claims 1-4 and 6.

6. The Office Action rejected claims 1, 2, 7 and 8 under 35 U.S.C. 102(b) as being anticipated by O'Donnell et al. (USPN 2004/0002221).

As acknowledged by the Office Action, O'Donnell et al. does not teach a structure comprising an electroplated coating as claimed. Instead, O'Donnell et al. teaches a coating layer which is applied with a sintered composition. A sintered coating layer does not have the same structure as an electroplated coating as claimed. This structural difference is defined by the present claim, and thus, O'Donnell et al. does not anticipate claims 1, 2, 7 and 8.

003330 P01 USA/ETCH/METAL/PJS  
Application No: 10/824,123  
Page 12 of 14

7. The Office Action rejected claims 1-5 under 35 U.S.C. 102(b) as being anticipated by Takeuchi et al. (JP 11-229142).

As again acknowledged by the Office Action, Takeuchi et al. does not teach a structure comprising an electroplated coating as claimed. Instead, Takeuchi et al. teaches "forming a YSZ coating layer by electrochemical methods on a reaction chamber surface." A YSZ coating layer by electrochemical methods on a reaction chamber surface does not have the same structure as an electroplated coating as claimed. This structural difference is defined by the present claim, and thus, Takeuchi et al. does not anticipate claims 1, 2, 7 and 8.

**Rejection Under 35 U.S.C. 103(a)**

1. The Office Action rejected claims 7-10 and 12 under 35 U.S.C. 102(b) as being unpatentable over Morita et al. (USPN 2002/0012791).

Applicant respectfully submits that the office action has not established a *prima facie* obviousness rejection. To establish a *prima facie* case of obviousness under 35 U.S.C. 103:

- (A) The claimed invention must be considered as a whole;
- (B) The references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination;
- (C) The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and
- (D) Reasonable expectation of success is the standard with which obviousness is determined.

*Hodosh v. Block Drug Co., Inc.*, 786 F.2d 1136, 1143 n.5, 229 USPQ 182, 187 n.5 (Fed. Cir. 1986).

003330 P01 USA/ETCH/METAL/PJS  
Application No: 10/824,123  
Page 13 of 14

As recognized by the Office Action, Morita et al. does not teach a structure comprising an electroplated coating as claimed. Instead, Morita et al. teaches a coating layer which is applied with a sintered composition. A sintered coating layer does not have the same structure as an electroplated coating as claimed. The Office Action states that "electroplated layers could encompass the structural and compositional characteristics of the coating layer of Morita et al., particularly in view of the lack of claimed processing parameters." However, Applicant submits that the Office Action has not explained why, or provided any reference that teaches, that the claimed electroplated layer would have the same structural and composition characteristics as the sintered composition layer taught by Morita et al.. The structural difference between an electroplated layer and a sintered composition is well-known by those of ordinary skill in the art. The burden of demonstrating that the two layers are identical and consequently obvious over one another falls upon the Examiner.

Nor would one of ordinary skill in the art be motivated to designed a structure encompassing an electroplated layer based on teachings to a structure having a sintered layer. For example, a sintered layer, by definition is processed at elevated temperatures which, as one example, can exceed 500 or even 1000°C. In contrast, electroplated layers are formed in a solution, often at room temperatures, or low temperatures. Even the underlying structure that is capable of receiving a sintered coating would be a different structure than one designed to receive an electroplated coating, because it would have to withstand the high temperatures to which it was exposed to in the sintering process. In contrast, the underlying structure capable of receiving an electroplated coating would not have to withstand such high temperatures. For these reasons, Morito et al. does not render obvious claims 7-10 and 12.

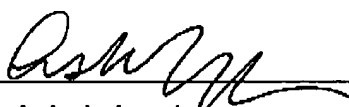
003330 P01 USA/ETCH/METAL/PJS  
Application No: 10/824,123  
Page 14 of 14

The above-discussed amendments are believed to place the present application in condition for allowance. Should the Examiner have any questions regarding the above remarks, the Examiner is requested to telephone Applicant's representative at the number listed below.

Respectfully submitted,  
JANAH & ASSOCIATES, P.C.

Date: May 30, 2006

By: \_\_\_\_\_



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